

Please add the following claims:

- B3
28. The method of claim 18, wherein if the genotype of the 5'LC PS is cytosine then the genotype of +46PS is guanine, and if the genotype of 5'LC PS is thymine then the genotype of +46PS is adenine.
  29. The method of claim 18, wherein the genotype of the 5'LC PS is cytosine then the genotype of +79PS is guanine, and if the genotype of 5'LC PS is thymine then the genotype of +79PS is cytosine.

#### REMARKS

Upon entry of the first and second preliminary amendments, claims 1-21, 23, and 26-29 will be pending. Claim 19 has been amended to overcome the inventive step objection in the IPER, which stated that claims 19 and 20 are obvious over Liggett, 1997, *Am. J. Respir. Crit. Care Med.* 156:S156-S162 in view of Turki et al., 1996, *Proc. Natl. Acad. Sci. USA* 93:10483-10488. The IPER asserted that, since claim 19 does not limit the definition of B<sub>2</sub>AR 5' gene, the claim could encompass the determination of the genotype in the coding region of the gene, as disclosed in the cited Liggett reference. As amended, claim 19 specifies that the genotype to be determined is a B<sub>2</sub>AR *genotype*, which is defined in the specification at page 12, lines 25-31 to require that the genotype include at least the polymorphic site in the 5'-leader cistron. This polymorphic site is not disclosed or suggested in either of the cited references. In addition, the IPER also stated that claim 19 was lacking clarity since it was not clear what was meant by a B<sub>2</sub>AR 5' gene. As amended, claim 19 removes the phrase B<sub>2</sub>AR 5' gene, and for reasons stated above, indicates that the region to be genotyped and haplotyped must contain at least the polymorphic site in the 5'-leader cistron. Thus, the Applicant respectfully submits that amended claim 19 overcomes the lack of inventive step objection as well as the lack of clarity objection.

Amended claim 26 and new claims 28 and 29, which depend from original claim 18, respectively, are directed to subject matter found in the originally filed specification. Support for amended claim 26 is found at page 25, lines 15-18. Support for claims 28 and 29 is found at page 15, lines 6-9. It is respectfully submitted that the new claims do not introduce new matter and their entry is respectfully requested. Should any questions arise, or if Applicant or Applicant's Attorney can facilitate examination of this Application, please contact the undersigned Attorney at the phone number below.

Respectfully Submitted,

*Gisela M. Field*

Gisela M. Field  
Genaissance Pharmaceuticals, Inc.  
Five Science Park  
New Haven, CT 06511

Reg. No. 47,562  
Tel. No. 203-786-3473

09856203-0651101